North Carolina Department of Environment and Natural Resources
Division of Air Quality

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

July 9, 2015

Mr. Ellis H. McGaughy
Plant Manager
Chemours Company - Fayetteville Works
22828 NC Highway 87 West
Fayetteville, North Carolina 28306-7332

Dear Mr. McGaughy:

SUBJECT: Air Quality Permit No. 03735T40
Facility ID: 0900009
Chemours Company - Fayetteville Works
Fayetteville
Bladen County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for an ownership change of a Title V permit received on June 29, 2015, we are forwarding herewith Air Quality Permit No. 03735T40 to Chemours Company - Fayetteville Works, Fayetteville, Bladen County, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503 have been listed for informational purposes. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction. Failure to do so is a violation of GS 143-215.108 and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

This Air Quality Permit shall be effective from July 9, 2015 until January 31, 2020*, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Connie J. Horne at (919) 707-8722.

Sincerely yours,

William D. Willets

William D. Willets, P.E, Chief, Permitting Section
Division of Air Quality, NCDENR

*This permit shall expire on the earlier of January 31, 2020 or the date the renewal of permit 03735T38 has been issued or denied.

Enclosure

cc: Heather Ceron, EPA Region 4
Steven Vozzo, Supervisor, Fayetteville Regional Office
Central Files

ATTACHMENT I:

Summary of Changes to Previous Permit (No. 03735T39)

Page(s)	Section	Description of Change(s)
Cover letter	---	Modified to reflect current permit number, issue, effective and expiration dates. Shortened permitee name from The Chemours Company FC, LLC, DBA, Chemours Company - Fayetteville Works to Chemours Company - Fayetteville Works.
All	Headers	Amended permit revision number.
Attachments and Pages 1-54	Entire permit, where applicable	Modified to reflect current permit number, issue, effective and expiration dates, and associated ownership change information.

ATTACHMENT II:

Insignificant Activities Pursuant to 15A NCAC 2Q .0503(8)

Source ID No.	Emission Source Description
I-01A	Polyvinyl Fluoride Process No. 1 house vacuum system
I-01B	Polyvinyl Fluoride Process No. 2 house vacuum system
I-02	Waste DMSO Storage Tank
I-03	Fugitive Emissions of Methylene Chloride
I-04	Chlorination of Riverwater to control mussel growth in equipment
I-05	Sitewide Laboratory Emissions
I-06	Outdoor abrasive blasting operation for items exceeding 8 feet in any dimension
I-07	Paint shop
I-08	Self-contained abrasive blasting cabinets
I-09	Paint spray booths
I-10	Abrasive blasting and painting building
I-11	Plasticizer storage tank
I-12	Nafion® Dispersion Process

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2D .1100, "Control of Toxic Air Pollutants", or 15A NCAC 2Q .0711, "Emission Rates Requiring a Permit".
3. For additional information regarding the applicability of GACT see the DAQ page titled "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities". The link to this site is as follows: http://daq.state.nc.us/permits/insig/

State of North Carolina,
Department of Environment,
and Natural Resources
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03735T40	03735T39	July 9, 2015	January 31, 2020*

*This permit shall expire on the earlier of January 31, 2020 or the date the renewal of permit 03735T38 has been issued or denied.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	**Chemours Company - Fayetteville Works**
Facility ID:	**0900009**
Facility Site Location:	**22828 NC Highway 87 W**
City, County, State, Zip:	**Fayetteville, Bladen County, NC, 28306-7332**
Mailing Address:	**22828 NC Highway 87 W**
City, State, Zip:	**Fayetteville, NC, 28306-7332**
Application Number:	**0900009.15A**
Complete Application Date:	**June 22, 2015**
Primary SIC Code:	**2821, 3081, 3083**
Division of Air Quality, Regional Office Address:	**Fayetteville Regional Office 225 Green Street, Suite 714 Fayetteville, NC 28301**

Permit issued this the 9th day of July 2015

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
6 to 11 and 39 to 44	PS-A **Case-by-case MACT**	Natural gas/No. 2 fuel oil-fired boiler (139.4 million Btu per hour maximum heat input)	N/A	N/A
	PS-B **Case-by-case MACT**	Natural gas/No. 2 fuel oil-fired boiler (88.4 million Btu per hour maximum heat input)	N/A	N/A
	PS-C **NSPS Dc Case-by-case MACT**	Natural gas/No. 2 fuel oil-fired boiler (97 million Btu per hour maximum heat input) equipped with a low-NOx burner	N/A	N/A
31 to 33 and 39 to 44	PS-Temp	Natural gas/No. 2 fuel oil-fired boiler (less than 100.0 million Btu per hour maximum heat input)	N/A	N/A
12 to 15 and 40 to 45	BS-A	Butyraldehyde storage tank	BCD-A	Brine-cooled condenser
	BS-B1.1 through BS-B1.4 **MACT FFFF**	Butacite® polyvinyl butyral flake reactors (4 units)	BCD-B1	Packed-bed column scrubber with mist eliminator (8 gallons per minute water injection rate averaged over a 3-hour period) ***State-enforceable only***
	BS-B2.1 through BS-B2.4 **MACT FFFF**	Butacite® polyvinyl butyral flake reactors (4 units)	BCD-B2	Packed-bed column scrubber with mist eliminator (8 gallons per minute water injection rate averaged over a 3-hour period) ***State-enforceable only***
	BS-C **MACT FFFF**	Butacite® polyvinyl butyral flake dryer	BCD-C1 BCD-C2	Cyclone separator Fabric filter (6,245 square feet of filter area)
	BS-E1	Butacite® Line No. 3 Sheeting Extrusion Process, including four (4) extruders	BCD-E1	Water-Cooled Condenser ***Voluntary use only***
	BS-E2	Butacite® Line No. 4 Sheeting Extrusion Process, including four (4) extruders	BCD-E2	Water-Cooled Condenser ***Voluntary use only***
	BS-E3	Butacite® Line No. 3 Back-End Processes, including a quencher, dryer/relaxer, and wind-up area	N/A	N/A
	BS-E4	Butacite® Line No. 4 Back-End Processes, including a quencher, dryer/relaxer, and wind-up area	N/A	N/A
	BS-F **MACT FFFF**	Butacite® PVA Unloading System and Storage Silos	N/A	N/A
	BS-G **MACT FFFF**	Butacite® PVA Dissolver Tank System	N/A	N/A

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
12 to 15 and 40 to 45	NS-A **MACT FFFF**	Nafion® Hexfluoropropylene epoxide process (HFPO)	NCD-Hdr1 -or- NCD-Hdr2	Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period) Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period)
	NS-B **MACT FFFF**	Nafion® Vinyl Ethers North process	NCD-Hdr1 -or- NCD-Hdr2	Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period) Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period)
	NS-C **MACT FFFF**	Nafion® Vinyl Ethers South process	NCD-Hdr1 -or- NCD-Hdr2	Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period) Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period)
	NS-D	Nafion® RSU Process	NCD-Hdr1 -or- NCD-Hdr2	Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period) Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period)
	NS-E	Nafion® Liquid waste stabilization	NCD-Hdr1 -or- NCD-Hdr2	Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period) Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period)

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
12 to 15 and 40 to 45	NS-F	Nafion® MMF process	NCD-Hdr1 -or- NCD-Hdr2	Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period) Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period)
	NS-G **MACT FFFF**	Nafion® Resins process	NCD-G	Venturi vacuum jet caustic scrubber
	NS-H	Nafion® membrane process	N/A	N/A
	NS-I	Nafion® membrane coating	N/A	N/A
	NS-J	Nafion® semiworks	N/A	N/A
	NS-K	Nafion® E-2 Process	N/A	N/A
	NS-L	Nafion® TFE/HCl separation unit	NCD-Hdr1 -or- NCD-Hdr2	Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period) Baffle-plate scrubber (7,000 kilogram/hour liquid injection rate averaged over a 3-hour period)
	NS-M	Nafion® TFE/CO_2 separation process	N/A	N/A
	NS-N	HFPO product container decontamination process	N/A	N/A
	NS-O	Vinyl Ethers North product container decontamination process	N/A	N/A
	NS-P	Vinyl Ethers South product container decontamination process	N/A	N/A
	SW-1	Semiworks polymerization operation	N/A	N/A
	SW-2	Semiworks laboratory hood	N/A	N/A
30 to 31 and 40 to 45	AS-A	Polymer Processing Aid Process	ACD-A1 ACD-A3	Wet scrubber (30 gallons per minute water injection rate averaged over a 3-hour period) ***State-enforceable only*** Wet scrubber installed on the building exhaust vent ***Voluntary use only***
	WTS-A	Extended aeration biological wastewater treatment facility	N/A	N/A

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
30 to 31 and 40 to 45	WTS-B, WTS-C	Two (2) Indirect steam-heated, rotary sludge dryers	WTCD-1	Impingement-type wet scrubber with mist eliminator ***State-enforceable only***
34 and 40 to 45	SGS-A	SentryGlas® Process	N/A	N/A
34 to 38 and 40 to 45	FS-B	Polyvinyl Fluoride Process No. 1	N/A	N/A
	FS-C	Polyvinyl Fluoride Process No. 2	N/A	N/A

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Natural gas/No. 2 fuel oil-fired boiler (ID No. PS-A), 139.4 million Btu per hour maximum heat input, Natural gas/No. 2 fuel oil-fired boiler (ID No. PS-B), 88.4 million Btu per hour maximum heat input, Natural gas/No. 2 fuel oil-fired boiler (ID No. PS-C) equipped with a low-NOx burner, 97 million Btu per hour maximum heat input

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	**Affected Sources: PS-A and PS-B** 0.2667 pounds particulate per million Btu heat input **Affected Sources: PS-C** 0.2268 pounds particulate per million Btu heat input	15A NCAC 2D .0503
Sulfur Dioxide	**Affected Sources: PS-A and PS-B** 2.3 pounds SO_2 per million Btu heat input, each	15A NCAC 2D .0516
Sulfur Dioxide	**Affected Source: PS-C** Fuel oil sulfur content shall not exceed 0.5% by weight.	15A NCAC 2D .0524 (40 CFR 60, Subpart Dc)
Visible Emissions	**Affected Source: PS-A** 40 percent opacity **Affected Source: PS-B** 20 percent opacity	15A NCAC 2D .0521(c) 15A NCAC 2D .0521(d)
Visible Emissions	**Affected Source: PS-C** 20 percent opacity	15A NCAC 2D .0524 (40 CFR 60, Subpart Dc)
Nitrogen Oxides, Sulfur Dioxide	**Affected Source: PS-B** Nitrogen oxide < 40 tons per year Sulfur dioxide < 40 tons per year	15A NCAC 2Q .0317 (PSD Avoidance)
Sulfur Dioxide	**Affected Sources: PS-A, PS-B, PS-C, and PS-Temp** Sulfur dioxide < 702.5 tons per year. See Section 2.2 A.1. of this permit	15A NCAC 2Q .0317 (PSD Avoidance)
Hazardous Air Pollutants	Best Combustion Practices	15A NCAC 2D .1109

1. **15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**
   a. Emissions of particulate matter from the combustion of fuel oil that are discharged from the affected boilers **(ID Nos. PS-A and PS-B)** into the atmosphere shall not exceed 0.2667 pounds per million Btu heat input.
   b. Emissions of particulate matter from the combustion of fuel oil that are discharged from the affected boiler **(ID No. PS-C)** into the atmosphere shall not exceed 0.2268 pounds per million Btu heat input.

   Testing [15A NCAC 2Q .0508(f)]
   c. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in Section 2.1 A.1.a and/or b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

   Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]
   d. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas or fuel oil in these sources.

2. **15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**
   a. Emissions of sulfur dioxide from the affected boilers **(ID Nos. PS-A and PS-B)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

   Testing [15A NCAC 2Q .0508(f)]
   b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

   Monitoring/Recordkeeping/Recordkeeping [15A NCAC 2Q .0508(f)]
   c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of natural gas or fuel oil in these sources.

3. **15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**
   a. Visible emissions from the affected boiler **(ID No. PS-A)** shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity.
   b. Visible emissions from the affected boiler **(ID No. PS-B)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

   Testing [15A NCAC 2Q .0508(f)]
   c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a or b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

   Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]
   d. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas or fuel oil in these sources.

4. **15A NCAC 2D .0524: New Source Performance Standards (40 CFR 60, Subpart Dc)**
   a. For the affected boiler **(ID No. PS-C)**, the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524, "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart Dc, including Subpart A, "General Provisions."

   Emission Limitations

   b. The maximum sulfur content of any fuel oil received and fired in the affected boiler **(ID No. PS-C)** shall not exceed 0.5 percent by weight. [40 CFR 60.42c(d)]
   c. Visible emissions from the affected boiler **(ID No. PS-C)** shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity. *[40 CFR 60.43c(c)]*

   Testing [15A NCAC 2Q .0508(f)]

   d. Within 60 days after achieving the maximum firing rate at the affected boiler **(ID No. PS-C)**, but not later than 180 days after initial startup, the Permittee shall conduct a Method 9 test (6-minute average of 24 observations) to determine the opacity of stack emissions in accordance with 40 CFR 60.45c(a)(8) and 40 CFR 60.8. All testing notifications and reports shall be submitted in accordance with General Condition JJ of this permit. If the Permittee fails to conduct the opacity observation or if the results of the test are above the applicable limit, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524. *[40 CFR 60.45c(a)(8)]*

   Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

   e. The Permittee shall retain a record of the quantity of natural gas and fuel oil fired at the affected boiler **(ID No. PS-C)** each calendar month. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if this record is not created and retained. *[49 CFR 60.48c(g)]*
   f. The Permittee shall retain a copy of the fuel supplier certification for any fuel oil fired at the affected boiler **(ID No. PS-C)**. The fuel supplier certification shall include the following information:
      i. The name of the oil supplier;
      ii. The sulfur content of the oil (in % by weight); and,
      iii. A statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR 60.41c.

      The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the sulfur content of the oil exceeds the limit provided in Section 2.1.A.4.b of this permit or if fuel supplier certifications are not retained as described above. *[40 CFR 60.46c(e), 40 CFR 60.48c(f)]*

   Initial Notification [15A NCAC 2Q .0508(f)]

   g. The Permittee shall submit a construction notification of the date construction of the affected boiler **(ID No. PS-C)** is commenced, postmarked no later than 30 days after such date. *[40 CFR 60.7(a)(1)]*
   h. The Permittee shall submit an initial notification to the Regional Supervisor within 15 days of actual startup of the affected boiler **(ID No. PS-C)**. The notification shall include:
      i. The actual date of initial startup; and,
      ii. The design heat input capacity of the boiler and identification of fuels to be combusted in the boiler.

      [40 CFR 60.48c(a), 40 CFR 60.7(a)(3)]

   Reporting [15A NCAC 2Q .0508(f)]

   i. The Permittee shall submit a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate fuel oil fired, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each

calendar year for the preceding six-month period between January and June. The summary report shall include the following information:

i. Fuel supplier certification(s) for distillate fuel oil, as provided in Section 2.1.A.4.e of this permit;
ii. A certified statement signed by the owner or operator that the records of fuel supplier certification(s) submitted represents all of the fuel fired at the affected boiler **(ID No. PS-C)** during the semiannual period; and,
iii. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and major modifications, the affected boiler **(ID No. PS-B only)** shall discharge into the atmosphere less than the following, per consecutive 12-month period.

Pollutant	Emission Limitation (tons per year)
Nitrogen Oxide	40
Sulfur Dioxide	40

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.5.a, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of fuel usage in a logbook (written or in electronic format), as follows:
   i. The total quantity (in mmscf) of natural gas fired at the affected boiler;
   ii. The total quantity (in 1,000 gal) of fuel oil fired at the affected boiler; and,
   iii. The fuel oil supplier certification for any fuel oil fired at the affected boiler, including the sulfur content of the fuel oil (in percent by weight).

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the fuel usage and fuel oil sulfur contents are not created and retained as required above.

d. The Permittee shall calculate monthly and 12-month rolling NOx emissions from the affected boiler within 30 days after the end of each calendar month. Calculations shall be recorded in a logbook (written or electronic format), according to the following formulas:
   i. Calculate NOx emissions from the previous calendar month using the following equation:

$$E_{NOx} = 20 * Q_{fo2} + 100 * Q_{ng}$$

Where, E_{NOx} = NOx emissions (in lbs) during the previous calendar month;
Q_{fo2} = Quantity of fuel oil fired during the previous calendar month (in 1,000 gal); and,
Q_{ng} = Quantity of natural gas fired during the previous calendar month (in mmscf).

   ii. Sum the NOx emissions from the affected boiler for the previous 12-month period to determine the 12-month rolling emission total.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the monthly calculations listed above are not retained or if the 12-month rolling emission totals are greater than the emission limit provided in Section 2.1 A.5.a of this permit.

e. The Permittee shall calculate monthly and 12-month rolling SO_2 emissions from the affected boiler within 30 days after the end of each calendar month. Calculations shall be recorded in a logbook (written or electronic format), according to the following formulas:
   i. Calculate SO_2 emissions from the previous calendar month using the following equation:

$$E_{SO_2} = 142 * S_{fo2} * Q_{fo2} + 0.6 * Q_{ng}$$

Where, E_{SO2} = SO_2 emissions (in lbs) during the previous calendar month;
S_{fo2} = Sulfur content in the fuel oil (in percent by weight).

   ii. Sum the SO_2 emissions from the affected boiler for the previous 12-month period to determine the 12-month rolling emission total.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the monthly calculations listed above are not retained or if the 12-month rolling emission totals are greater than the emission limit provided in Section 2.1 A.5.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly NOx and SO_2 emissions from the affected boiler for the previous 17 calendar months;
   ii. The 12-month rolling NOx and SO_2 emissions for each 12-month period ending during the reporting period; and,
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 2D .1109: Case-by-Case MACT

a. The initial compliance date for the emission limitations and associated monitoring, recordkeeping, and reporting requirements listed below is **December 12, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date. These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 2D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ.

Work Practice Standards [15A NCAC 2Q .0508(f)]

c. The Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
   i. Inspect the burner, and clean or replace any components of the burner as necessary;
   ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
   iii. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers are not inspected and maintained as required above.

d. The results of any required annual burner inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date of each recorded action;
   ii. The results of each inspection; and,
   iii. The results of any maintenance performed on the boilers.
   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. Semiannual Summary Report. The Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The first summary report shall be required on January 30, 2014. The report shall include the following:
   i. Company name and address;
   ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
   iii. Date of report and beginning and ending dates of the reporting period; and,
   iv. Signed statement indicating that no new types of fuel were fired in the affected sources.

B. Butacite® Process Area consisting of one butyraldehyde storage tank (ID No. BS-A) controlled by a brine cooled condenser (ID No. BCD-A),
Four Butacite® flake reactors (ID Nos. BS-B1.1 through BS-B1.4) controlled by a packed-bed scrubber (ID No. BCD-B1),
Four Butacite® flake reactors (ID Nos. BS-B2.1 through BS-B2.4) controlled by a packed-bed scrubber (ID No. BCD-B2),
One Butacite® flake dryer (ID No. BS-C) controlled by a cyclone (ID No. BCD-C1) and fabric filter (ID No. BCD-C2) and,
Butacite® Line No. 3 Sheeting Extrusion Process, including four (4) extruders (ID No. BS-E1) controlled by a water-cooled condenser (ID No. BCD-E1) (voluntary use only)
Butacite® Line No. 4 Sheeting Extrusion Process, including four (4) extruders (ID No. BS-E2) controlled by a water-cooled condenser (ID No. BCD-E2) (voluntary use only)
Butacite® Line No. 3 Back-End Process, including a quencher, dryer/relaxer, and wind-up area (ID No. BS-E3)
Butacite® Line No. 4 Back-End Process, including a quencher, dryer/relaxer, and wind-up area (ID No. BS-E4)
Butacite® PVA Unloading System and Storage Silos (ID No. BS-F)
Butacite® PVA Dissolver Tank System (ID No. BS-G)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	**Affected Source: BS-C, only** $E = 4.10\ P^{0.67}$ for $P < 30$ tons/hour where: E = allowable emission rate in pounds per hour, and P = process weight rate in tons per hour	15A NCAC 2D .0515
Visible emissions	**Affected Source: BS-C, only** 20% visible opacity emissions	15A NCAC 2D .0521
Odors	**State-enforceable only** Odorous emissions must be controlled.	15A NCAC 2D .1806
Hazardous air pollutants	Recordkeeping requirements for each MCPU with Group 2 batch process vents to demonstrate total HAP emissions less than 10,000 lbs/12-month.	15A NCAC 2D .1111 (40 CFR 63, Subpart FFFF)

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the affected source **(ID No. BS-C)** shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where: E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from the Butacite® flake dryer **(ID No. BS-C)** shall be controlled by the bagfilter **(ID No. BCD-C2)** and cyclone separator **(ID No. BCD-C1)**. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. A monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. An annual internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.

d. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each inspection;
   iii. The results of any maintenance performed on the bagfilters; and
   iv. Any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the affected source **(ID No. BS-C)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission point of the affected source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.2.a above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

STATE-ENFORCEABLE ONLY

3. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the above listed equipment without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

b. Odorous emissions from the butyraldehyde storage tank **(ID No. BS-A)** shall be controlled by a condenser **(ID No. BCD-A)**. To comply with the provisions of this Permit and ensure that maximum control efficiency is maintained, the Permittee shall perform periodic inspections and maintenance as recommended by the manufacturer. The results of the inspections and maintenance shall be recorded in a logbook (either written or electronic format).

c. Gaseous emissions from the Butacite® flake reactor line **(ID Nos. BS-B1.1 through BS-B1.4)** shall be controlled by packed column scrubber **(ID No. BCD-B1)**. Gaseous emissions from the Butacite® flake reactor line **(ID Nos. BS-B2.1 through BS-B2.4)** shall be controlled by packed column scrubber **(ID No. BCD-B2)**.

Monitoring/Recordkeeping

d. To comply with the provisions of this Permit and ensure that maximum control efficiency of each control device is maintained, the Permittee shall perform periodic inspections and maintenance as recommended by the manufacturer. As a minimum, the inspection and maintenance program for the scrubbers shall include inspection of spray nozzles, packing material, chemical feed system (if so equipped), and the cleaning/calibration of all associated instrumentation.

e. The Permittee shall ensure the proper performance of the Flake Reactor Line's packed column scrubbers **(ID Nos. BCD-B1 and BCD-B2)** by monitoring the following operational parameters:
   i. Liquid flow rate (minimum of 8 gallons per minute averaged over a 3-hour period), and
   ii. Differential pressure across the scrubber (maximum of 30 inches of water pressure averaged over a 3-hour period), with a high differential pressure alarm.

f. The Permittee shall record the results of inspections in a logbook (written or electronic format) that shall be kept on site and made available to Division of Air Quality personnel upon request. Any variance from the manufacturer's recommendations or the permit monitoring requirements, or the failure of the air pollution control equipment to operate in a normal and usual manner, shall be investigated with corrections made and dates of action recorded in the log book. The inspection and maintenance activities, as well as required monitoring for scrubbing liquid flow rates, and scrubber

pressure drops, if appropriate, shall be recorded.

4. **15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT), 40 CFR 63, Subpart FFFF: NESHAP for Miscellaneous Organic Chemical Manufacturing (MON)**

   a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart FFFF, including Subpart A, "General Provisions".

   Recordkeeping [15A NCAC 2Q .0508(f)]

   b. For each affected MPCU with a Group 2 Process Vent, including the Butacite® PVA Unloading System and Storage Silos **(ID No. BS-F)**, the Butacite® PVA Dissolving System **(ID Nos. BS-G)**, and the Butacite® Flake Reactor System **(ID Nos. BS-B1.1 through BS-B1.4 and BS-B2.1 through BS-B2.4)**, and the Butacite® Flake Dryer **(ID No. BS-C)**, the Permittee shall retain the following records:
      i. A record of the day each batch was completed;
      ii. A record of whether each batch operated was considered a standard batch;
      iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a non-standard batch; and,
      iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

      The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the records listed above are not retained, or if the total HAP emissions from either MCPU are 10,000 lbs or greater on a rolling 12-month basis. [*40 CFR 63.2525(e)(4)*]

   c. For each affected Group 2 wastewater stream, the Permittee shall retain the following records:
      i. MPCU identification and description;
      ii. Stream identification code;
      iii. Concentration of compounds listed in Table 8 and Table 9 of 40 CFR 63, Subpart FFFF (in ppmw), including documentation of the methodology used to determine concentration; and,
      iv. Stream flow rate (in L/min).

      The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the records listed above are not retained. [*40 CFR 63.2585(a), 40 CFR 63.147(b)(8)*]

C. Nafion® Process Area consisting of one hexfluoropropylene epoxide process (ID No. NS-A) controlled by one baffle-plate scrubber (ID No. NCD-Hdr1 or NCD-Hdr2),
Two vinyl ethers processes (ID Nos. NS-B and NS-C) EACH controlled by one of two available baffle-plate scrubbers (ID No. NCD-Hdr1 or NCD-Hdr2),
One RSU process (ID No. NS-D) controlled by one baffle-plate scrubber (ID No. NCD-Hdr1 or NCD-Hdr2),
One liquid waste stabilization process (ID No. NS-E) controlled by one baffle-plate scrubber (ID No. NCD-Hdr1 or NCD-Hdr2),
One MMF process (ID No. NS-F) controlled by one baffle-plate scrubber (ID No. NCD-Hdr1 or NCD-Hdr2),
One resins fluorination process (ID No. NS-G) controlled by a venturi vacuum jet scrubber (ID No. NCD-G),
One Nafion® membrane process (ID No. NS-H),
One Nafion® membrane coating process (ID No. NS-I),
Three Nafion® semiworks processes (ID Nos. SW-1, SW-2, and NS-J),
One E-2 Process (ID No. NS-K),
One TFE/HCl separation unit (ID No. NS-L) controlled by one baffle-plate scrubber (ID No. NCD-Hdr1 or NCD-Hdr2), and
One uncontrolled TFE/CO_2 separation unit (ID No. NS-M)
One HFPO product container decontamination process (ID No. NS-N)
One Vinyl Ethers North product container decontamination process (ID No. NS-O)
One Vinyl Ethers South product container decontamination process (ID No. NS-P)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	**Affected Sources: ID No. NS-I** $E = 4.10\ P^{0.67}$ for $P < 30$ tons/hour where: E = allowable emission rate in pounds per hour, and P = process weight rate in tons per hour	15A NCAC 2D .0515
Visible Emissions	**Affected Sources: ID No. NS-I** 20% visible opacity emissions	15A NCAC 2D .0521
Odors	**State-enforceable only** Odorous emissions must be controlled	15A NCAC 2D .1806
Toxic Air Pollutants	**State-enforceable only** Toxic air pollutant limits shall not be exceeded. See Sections 2.2 B.1 and 2.2 B.2	15A NCAC 2D .1100
Volatile Organic Compounds	**Affected Sources: ID No. NS-B** VOC emissions < 68.9 tons/12-month **Affected Sources: ID No. NS-G** VOC emissions < 40 tons/12-month **Affected Sources: ID No. NS-A** VOC emissions < 85.3 tons/12-month **Affected Sources: ID No. NS-N** VOC emissions < 40 tons/12-month	15A NCAC 2Q .0317 (PSD Avoidance)
Hazardous Air Pollutants	**Affected Sources: ID Nos. NS-A, NS-B, NS-C, and NS-G** LDAR, wastewater, and heat exchanger requirements.	15A NCAC 2D .1111 (40 CFR 63, Subpart FFFF)

1. **15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**
   a. Emissions of particulate matter from the affected source **(ID No. NS-I)** shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where: E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

   b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

   c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above (or the formulas contained in 15A NCAC 2D .0515) can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.

Reporting [15A NCAC 2Q .0508(f)]

   d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. **15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**
   a. Visible emissions from the affected source **(ID No. NS-I)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2Q .0508(f)]

   b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

   c. No monitoring/recordkeeping/reporting is required for visible emissions from this source.

STATE-ENFORCEABLE ONLY

3. **15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**
   a. The Permittee shall not operate the above listed equipment without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, the Vinyl Ethers North process **(ID No. NS-B)** shall discharge into the atmosphere less than 68.9 tons of VOCs per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test indicate annual emission rates in exceedance of the limit given in Section 2.1 C.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To demonstrate compliance with the limit provided in Section 2.1 C.4.a, within 30 days of the end of each calendar month the Permittee shall create and retain production records and estimate associated VOC emissions for the previous calendar month, as follows:

i. Using measured vent flow rates and assumed compositions, determine the process vent mass flow rates of non-acid fluoride VOC (Q_{nAF}) and acid fluoride VOC (Q_{AF}) during the previous calendar month (in lb/month);

ii. Considering the 99.6% efficiency of the baffle-plate scrubber **(ID No. NCD-Hdr1)** to control acid fluoride VOC, calculate the VOC emissions (E_V) from the process vents during the previous calendar month (in lb/month) using the following equation:

$$E_V = Q_{nAF} + 0.004(Q_{AF})$$

iii. Record the total solvents used (M) in the affected facility during the previous calendar month (in lb/month);

iv. Record the total solvent waste generation (W) for the affected facility during the previous calendar month (in lb/month);

v. Calculate the solvent VOC emissions (E_S) from the affected facility during the previous calendar month (in lb/month) using the following equation:

$$E_S = M - W$$

vi. Determine the VOC emissions from maintenance emissions (E_M) during the previous calendar month.

vii. Calculate the VOC emissions from fugitive emissions (E_F) using accepted practices during the previous calendar month.

viii. Record VOC emissions from any accidental releases (E_A) during the previous calendar month.

ix. Calculate the total process VOC emissions (E) using the following equation:

$$E = E_V + E_S + E_M + E_F + E_A$$

x. Calculate the 12-month rolling VOC emissions from the affected facility by summing the monthly VOC emissions (E), as calculated in ix., above, for the previous consecutive 12-months.

Required records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not created and retained, or if the 12-month rolling VOC emission rate calculated in x. above exceeds the limit in Section 2.1 C.4.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain

the following:

i. The monthly VOC emissions from the affected facility for the previous 17 calendar months;
ii. The 12-month rolling VOC emissions for each 12-month period ending during the reporting period; and,
iii. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, the resins process **(ID No. NS-G)** shall discharge into the atmosphere less than 40 tons of VOCs per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test indicate annual emission rates in exceedance of the limit given in Section 2.1 C.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To demonstrate compliance with the limit provided in Section 2.1 C.5.a, within 30 days of the end of each calendar month the Permittee shall create and retain production records and estimate associated VOC emissions for the previous calendar month, as follows:
   i. Record the total raw materials fed (M) to the affected facility during the previous calendar month (in kg/month);
   ii. Record the total transformed materials collected (P) for the affected facility during the previous calendar month (in kg/month);
   iii. Record the total untransformed materials collected (W) for the affected facility during the previous calendar month (in kg/month);
   iv. Determine the VOC emissions from the filling of storage tanks (S) for the affected facility during the previous calendar month;
   v. Calculate the VOC emissions (E) from the affected facility during the previous calendar month (in lb/month) using the following equation:

$$E = (M - P - W + S) * 2.2$$

   vi. Calculate the 12-month rolling VOC emissions from the affected facility by summing the monthly VOC emissions (E), as calculated in 2.1 C.5.c.iv above, for the previous consecutive 12-months.

Required records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not created and retained, or if the 12-month rolling VOC emission rate calculated in v. above exceeds the limit in Section 2.1 C.5.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly VOC emissions from the affected facility for the previous 17 calendar months;
   ii. The 12-month rolling VOC emissions for each 12-month period ending during the reporting period; and,
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, the HFPO process **(ID No. NS-A)** shall discharge into the atmosphere less than 85.3 tons of VOCs per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test indicate annual emission rates in exceedance of the limit given in Section 2.1 C.6.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To demonstrate compliance with the limit provided in Section 2.1 C.6.a, within 30 days of the end of each calendar month the Permittee shall create and retain production records and estimate associated VOC emissions for the previous calendar month, as follows:
   i. Record the total raw material HFP consumed (M_{HFP}) in the affected facility during the previous calendar month;
   ii. Record the average vent flow rate and composition from the AF column (Q_{AC}) and Stripper columns (Q_{SC}) during the previous calendar month;
   iii. Using a combination of ratios of vent rates (Q_{AC} and Q_{SC}) to HFP consumption (M_{HFP}) from the process flowsheet and actual vent data, determine the process VOC emissions (E_P) from the AF column (E_{AC}), stripper column (E_{SC}), solvent recycle tank (E_{SRT}), and routine decontamination of HFP unloading system (E_{DC}) through the baffle-plate scrubber **(ID No. NCD-Hdr1 or NCD-Hdr2)**.

$$E_P = E_{AC} + E_{SC} + E_{SRT} + E_{DC}$$

   iv. Calculate the VOC emissions through the baffle-plate scrubber **(ID No. NCD-Hdr1 or NCD-Hdr2)** from maintenance activity (E_M) based on vessel volumes and vapor density for each occurrence of this activity during the previous calendar month.
   v. Calculate the VOC emissions from fugitive emissions (E_F) using accepted practices during the previous calendar month.
   vi. Record VOC emissions from any accidental releases (E_A) during the previous calendar month.
   vii. Calculate the VOC emissions (E) from the affected facility during the previous calendar month (in lb/month) using the following equation:

$$E = E_P + E_M + E_F + E_A$$

   viii. Calculate the 12-month rolling VOC emissions from the affected facility by summing the monthly VOC emissions (E), as calculated in 2.1 C.6.c.vii above, for the previous consecutive 12-months.

Required records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not created and retained, or if the 12-month rolling VOC emission rate calculated in viii., above, exceeds the limit in Section 2.1 C.6.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly VOC emissions from the affected facility for the previous 17 calendar months;
   ii. The 12-month rolling VOC emissions for each 12-month period ending during the reporting period;

and,

iii. All instances of deviations from the requirements of this permit must be clearly identified.

7. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, the HFPO Product Container Decontamination Process **(ID No. NS-N)** shall discharge into the atmosphere less than 40.0 tons of VOCs per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

b. To demonstrate compliance with the limit provided in Section 2.1 C.7.a, within 30 days of the end of each calendar month the Permittee shall create and retain records and estimate associated VOC emissions for the previous calendar month, as follows:
   i. Create a record of each container received at the facility including:
      (A) The date the container was decontaminated; and,
      (B) The total mass of VOC released from the container (in lbs).
   ii. Calculate the VOC emissions from the process during the previous calendar month (in lb/month) by summing the quantity of VOC released from each container decontaminated during the previous calendar month.
   iii. Calculate the VOC emissions from the process during the previous consecutive 12-month period (in tons/12-months) by summing the quantity of VOC released for the previous twelve (12) calendar months.

   Required records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not created and retained, or if the 12-month rolling VOC emission rate calculated above exceeds the limit in Section 2.1 C.7.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

c. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly VOC emissions from the affected facility for the previous 17 calendar months;
   ii. The 12-month rolling VOC emissions for each 12-month period ending during the reporting period; and,
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

8. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT),
40 CFR 63, Subpart FFFF: NESHAP for Miscellaneous Organic Chemical Manufacturing (MON)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart FFFF, including Subpart A, "General Provisions".

Operating Standards [15A NCAC 2Q .0508(f)]

b. Opening a safety device, as defined in §63.2550, is allowed at any time conditions require it to avoid unsafe conditions. *[40 CFR 63.2450(p)]*

Equipment Identification & Special Designations [40 CFR 63.2480(a), 40 CFR 63.1022]

c. All equipment affected by these leak requirements shall be identified. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, by designation of process unit or affected facility boundaries by some form of weatherproof identification, or by other appropriate methods. The following additional equipment identification requirements also apply:
   i. Connectors need not be individually identified if all affected connectors in a designated area or length of pipe are identified as a group, and the number of connectors subject is indicated.
   ii. Identify pressure relief devices equipped with upstream rupture disks, as described in 40 CFR 63.1030(e); and,
   iii. The identity, either by list, location (area or group), or other method, of equipment in regulated material service less than 300 hours per calendar year.
   iv. Identify unsafe-to-monitor equipment, meeting the criteria provided in 40 CFR 63.1022(c)(1), an explanation why the equipment is unsafe-to-monitor, and record the planned schedule for monitoring this equipment.
   v. Identify difficult-to-monitor equipment, meeting the criteria provided in 40 CFR 63.1022(c)(2) , an explanation why the equipment is difficult-to-monitor, and record the planned schedule for monitoring this equipment.
   vi. Identify unsafe-to-repair equipment, meeting the criteria provided in 40 CFR 63.1022(d)(1) , an explanation why the equipment is unsafe-to-repair.

   The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if affected equipment is not identified as required above. [*40 CFR 63. 1038(b)*]

d. If the facility includes equipment designated as:
   i. Unsafe-to-monitor, create and implement a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair procedures that are consistent with the requirements of this permit.
   ii. Difficult-to-monitor, create and implement a written plan that requires monitoring of the equipment at least once per calendar year and repair procedures that are consistent with the requirements of this permit.

   The Permittee shall retain required written plans on-site, and make them available to NC DAQ for review upon request. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the required plans are not created, implemented, and retained. [*40 CFR 63. 1038(b)*]

Equipment Leak Standards & Inspections [40 CFR 63.2480(a), 40 CFR 63, Subpart UU]
Standards for Valves in Light Liquid, Gas and Vapor Service [40 CFR 63.1025]

e. The instrument reading that defines a leaking valve is **500 ppm or greater**.

f. *Instrument inspection.* The Permittee shall monitor valves for leaks using the instrument monitoring methods described in 40 CFR 63.1023(b)-(c) at the frequency specified below:
   i. If at least the greater of 2 valves or 2% of the valves in a process unit leak, as calculated according to 40 CFR 63.1025(c), monitor each valve once per month.
   ii. At process units with less than the greater of 2 leaking valves or 2% leaking valves, monitor each valve once each calendar quarter, except as provided in iii., iv., or, v. below.
   iii. At process units with less than 1 percent leaking valves, the Permittee may elect to monitor each valve once every two quarters.
   iv. At process units with less than 0.5 percent leaking valves, the Permittee may elect to monitor each valve once every four quarters.
   v. At process units with less than 0.25 percent leaking valves, the Permittee may elect to monitor each valve once every 2 years.

   The Permittee may choose to subdivide the valves in the applicable process units or groups of process units and apply the provisions above to each subgroup. If the Permittee elects to subdivide the valves,

it shall comply with the provisions of 40 CFR 63.1025(b)(4). The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet the requirements listed above.

g. The percentage of leaking valves, used to determine the required monitoring frequency above, shall be calculated according to the procedures in 40 CFR 63.1025(c).

h. The Permittee shall create and retain a record of the monitoring schedule for each process unit. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not keep this record. [*40 CFR 63. 1025(b)(3)(vi), 40 CFR 63. 1038(c)(1)(i)*]

i. If a leak is identified:
   i. It shall be repaired as provided in the repair provisions of this section.
   ii. After a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. This requirement is in addition to the monitoring required to satisfy the definition of repaired and first attempt at repair. The required periodic monitoring may be used if it satisfies the timing requirement of this condition. If a leak is detected by this follow-up monitoring, follow the provisions below to determine whether that valve must be counted as a leaking valve:
      (A) If the periodic monitoring was used to satisfy the follow-up monitoring requirement, then the valve shall be counted as a leaking valve.
      (B) If other monitoring is used satisfy the follow-up monitoring requirements, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.

   The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet the requirements listed above.

j. Unsafe-to-monitor valves. Any valve that is designated unsafe-to-monitor is exempt from the monitoring and repair requirements this section and the Permittee shall monitor the valve according to the written plan. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet these requirements.

k. Difficult-to-monitor valves. Any valve that is designated as difficult-to-monitor is exempt from the monitoring requirements of this section and the Permittee shall monitor the valve according to the written plan. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet these requirements.

Standards for Pumps in Light Liquid Service [40 CFR 63.1026]

l. The instrument reading that defines a leaking pump is **1,000 ppm or greater**. Repair is not required unless an instrument reading of 2,000 ppm or greater is detected.

m. *Visual inspection.* Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The visual inspection shall be consistent with the methods described in 40 CFR 63.1023(d). Document that the inspection was conducted and the date of the inspection. If are indications of liquids dripping from the pump seal at the time of the weekly inspection, follow either of the following procedures:
   i. Conduct instrument monitoring of the pump using the methods described in 40 CFR 63.1023(b)-(c). If the instrument reading indicates a leak (1,000 ppm), it shall be repaired as provided in the repair provisions of this section unless the reading is less than 2,000 ppm; or
   ii. Eliminate the visual indications of liquids dripping.

   The Permittee shall document each visual pump inspection. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not monitor and repair pumps as listed above. [*40 CFR 63.1026(b)(4), 40 CFR 63.1038(c)(2)(i)*]

n. *Instrument inspection.* The Permittee shall monitor affected pumps once per calendar month using the instrument monitoring methods described in 40 CFR 63.1023(b)-(c). Leaks shall be repaired as provided in the repair provisions of this section. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not monitor and repair pumps as required above.

o. Unsafe-to-monitor pumps. Any pump that is designated as unsafe-to-monitor is exempt from the inspection requirements provided above, and shall monitor and inspect the pump in accordance with the

written plan. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet these requirements.

Standards for Connectors in Gas and Vapor and Light Liquid Service [40 CFR 63.1027]

p. The instrument reading that defines a leaking connector is **500 ppm or greater**.

q. *Instrument inspection.* The Permittee shall monitor connectors for leaks using the instrument monitoring methods described in 40 CFR 63.1023(b)-(c). The required frequency of monitoring is based on the monitoring results from the previous leak inspection, as provided below:
   i. If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year).
   ii. If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. The Permittee may satisfy this requirement by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4 year monitoring period.
   iii. If the percent leaking connectors in the process unit was less than 0.25 percent, monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period and, based on the results of this inspection:
      (A) If the percent leaking connectors detected is greater than or equal to 0.35 percent of the monitored connectors, monitor all remaining connectors as soon as practical, but within the next 6 months. At the conclusion of monitoring, the new monitoring frequency shall be determined based on the percent leaking connectors of the total monitored connectors.
      (B) If the percent leaking connectors is less than 0.35 percent of the monitored connectors, monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period.

   The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not monitor and repair connectors as listed above.

r. Create and retain a record of the monitoring schedule and the start date and end date of each monitoring period under this section for each affected process unit. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not keep these records. [*40 CFR 63.1027(b)(3)(v), 40 CFR 63.1038(c)(2)(i)*]

s. If a leak is identified:
   i. It shall be repaired as provided in the repair provisions of this section.
   ii. After a leak has been repaired, re-monitor the connector once within 90 days after repair to confirm that it is not leaking.

   The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if leaks are not repaired as required above.

t. Unsafe-to-monitor connectors. Any connector that is designated as unsafe-to-monitor is exempt from the monitoring and repair requirements this section and the Permittee shall monitor the connector according to the written plan. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet these requirements.

Standards for Agitators in Gas and Vapor and Light Liquid Service [40 CFR 63.1028]

u. The instrument reading that defines a leaking agitator is **10,000 ppm or greater**.

v. *Visual inspection.* Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. The visual inspection shall be consistent with the methods described in 40 CFR 63.1023(d). Document that the inspection was conducted and the date of the inspection. If are indications of liquids dripping from the agitator seal at the time of the weekly inspection, follow either of the following procedures:
   i. Conduct instrument monitoring of the pump using the methods described in 40 CFR 63.1023(b)-(c). If the instrument reading indicates a leak (10,000 ppm), it shall be repaired as provided in the repair provisions of this section; or

ii. Eliminate the visual indications of liquids dripping.

The Permittee shall document each visual agitator inspection. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not monitor and repair agitators as required above. [*40 CFR 63.1028, 40 CFR 63.1038(c)(4)(i)*]

w. *Instrument inspection.* The Permittee shall monitor affected agitator once per calendar month using the instrument monitoring methods described in 40 CFR 63.1023(b)-(c). Leaks shall be repaired as provided in the repair provisions of this section. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not monitor and repair agitators as required above.

Standards for Pressure Relief Valves [40 CFR 63.1030]

x. The instrument reading that defines a leaking pressure relief valve is **500 ppm or greater**. This standard does not apply during pressure releases as provided below. After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release.

y. *Instrument inspection.* The pressure relief device shall be monitored no later than five calendar days after the pressure release to confirm the condition indicated by an instrument reading of less than 500 parts per million above background using the instrument monitoring methods described in 40 CFR 63.1023(b)-(c). Record the dates and results of the monitoring including the background level measured and the maximum instrument reading measured. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not monitor and maintain pressure relief valves as required above. [*40 CFR 63.1038(c)(5)*]

Equipment Leak Identification [40 CFR 63.2480(a)]

z. When a leak is detected using either sensory or instrument monitoring methods, a weatherproof and readily visible identification shall be attached to the leaking equipment. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if each detected leak is not identified as provided above. [*40 CFR 63.1023(e)(1)*]

aa. Leak identifications that are placed on leaking equipment may be removed as follows:

i. Leak identification on a valve in gas/vapor or light liquid service may be removed after it has been re-monitored as required in this section, and no leak has been detected during that monitoring.

ii. Leak identification on a connector in gas/vapor or light liquid service may be removed after it has been re-monitored as required in this section and no leak has been detected during that monitoring.

iii. Leak identification on other equipment may be removed after it is repaired.

[*40 CFR 63.1024(c)*]

Equipment Leak Repair [40 CFR 63.2480(a), 40 CFR 63, Subpart UU]

bb. The Permittee shall repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except where "Delay of Repair" or "Unsafe to Repair" provisions apply. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

i. First attempt at repair for pumps includes, but is not limited to, tightening the packing gland nuts and/or ensuring that the seal flush is operating at design pressure and temperature.

ii. First attempt at repair for valves includes, but is not limited to, tightening the bonnet bolts, and/or replacing the bonnet bolts, and/or tightening the packing gland nuts, and/or injecting lubricant into the lubricated packing.

cc. *Delay of repair.* Delay of repair is allowed for any of the conditions listed below. The Permittee shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown.

i. Delay of repair is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in v. below.

ii. Delay of repair is allowed for equipment that is isolated from the process and that does not remain in regulated material service.

iii. Delay of repair for valves, connectors, and agitators is also where:

(A) The Permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and

(B) When repair procedures are affected, the purged material is collected and destroyed, collected and routed to a fuel gas system or process, or recovered in a control device.

iv. Delay of repair for pumps is also allowed where:

(A) Repair requires replacing the existing seal design with a new system that the Permittee has determined through a Quality Improvement Plan will provide better performance or:

(1) A dual mechanical seal system will be installed;

(2) A pump that meets the requirements of 40 CFR 63.1026(e)(2) will be installed; or

(3) A system that routes emissions to a process or a fuel gas system or a closed vent system and control device will be installed; and

(B) Repair is completed as soon as practical, but not later than 6 months after the leak was detected.

v. Delay of repair beyond a process unit or affected facility shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit or affected facility shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit or affected facility shutdown will not be allowed unless the third process unit or affected facility shutdown occurs sooner than 6 months after the first process unit or affected facility shutdown.

dd. Unsafe-to-repair connectors. Any connector that is identified as unsafe-to-repair is exempt from the leak repair requirements of this permit.

Equipment Leak Recordkeeping [40 CFR 63.2480(a), 40 CFR 63, Subpart UU]

ee. For each leak detected, the following information shall be recorded and maintained:

i. The date of first attempt to repair the leak.

ii. The date of successful repair of the leak.

iii. Maximum instrument reading measured by Method 21 of 40 CFR 60, Appendix A at the time the leak is successfully repaired or determined to be non-repairable.

iv. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak as specified below:

(A) The Permittee may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

v. Dates of process unit or affected facility shutdowns that occur while the equipment is unrepaired.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the records listed above are not created and retained. [*40 CFR 63.1023(e)(2), 40 CFR 63.1024(f), 40 CFR 63. 1038(b)*]

ff. Create and retain the following general records:

i. General and specific equipment identification if the equipment is not physically tagged and the Permittee is electing to identify the affected equipment through written documentation such as a log or other designation;

ii. Written plans for any equipment that is designated as unsafe- or difficult-to-monitor; and,

iii. A record of the identity and justification of any equipment that is designated as unsafe-to-repair.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the records listed above are not created and retained. [*40 CFR 63. 1038(b)*]

Heat Exchanger Requirements [15A NCAC 2Q .0508(f)]

gg. Prepare and implement a monitoring plan that documents the procedures that will be used to detect leaks of process fluids into cooling water. The plan shall require monitoring of one or more surrogate indicators (e.g., pH, conductivity, etc.) or monitoring of one or more process parameters or other conditions that indicate a leak. The plan shall include the following:
   i. A description of the parameter or condition to be monitored and an explanation of how the selected parameter or condition will reliably indicate the presence of a leak;
   ii. The parameter level(s) or conditions(s) that shall constitute a leak. This shall be documented by data or calculations showing that the selected levels or conditions will reliably identify leaks. The monitoring must be sufficiently sensitive to determine the range of parameter levels or conditions when the system is not leaking. When the selected parameter level or condition is outside that range, a leak is indicated;
   iii. The monitoring frequency which shall be no less frequent than monthly for the first 6 months and quarterly thereafter to detect leaks;
   iv. The records that will be maintained to document compliance with the requirements of this section.

   If a substantial leak is identified by methods other than those described in the monitoring plan and the method(s) specified in the plan could not detect the leak, revise the plan and document the basis for the changes no later than 180 days after discovery of the leak. Maintain a copy of the monitoring plan on-site. If the monitoring plan is superseded, retain the most recent superseded plan at least until 5 years from the date of its creation. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet the above requirements. [*40 CFR 63.2490, 40 CFR 63.104(c)*]

hh. If a leak is detected in any heat exchanger system, it shall be repaired as soon as practical but not later than 45 calendar days after the Permittee receives results of monitoring tests indicating a leak, unless the Permittee demonstrates that the results are due to a condition other than a leak. Once the leak has been repaired, the owner or operator shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it is not repaired as required above, except where it applies the delay of repair provisions. [*40 CFR 63.2490, 40 CFR 63.104(d)*]

ii. Delay of repair of heat exchange systems is allowed if the equipment is isolated from the process. Delay of repair is also allowed if repair is technically infeasible without a shutdown and any one of the conditions listed in 40 CFR 63.104(e)(1)-(2) is met. [*40 CFR 63.2490, 40 CFR 63.104(e)*]

jj. For each affected heat exchanger system, the Permittee shall retain the following records:
   i. Monitoring data indicating a leak, the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination;
   ii. Records of any leaks detected by procedures other than those provided in the written plan, including the date the leak was discovered;
   iii. The dates of efforts to repair leaks; and,
   iv. The method or procedure used to confirm repair of a leak and the date repair was confirmed.

   The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the records listed above are not retained. [*40 CFR 63.2490, 40 CFR 63.104(f)*]

Additional Recordkeeping [15A NCAC 2Q .0508(f)]

kk. Create and retain the following records on each affected MCPU:
   i. A description of the process and the type of process equipment used;
   ii. An identification of related process vents (including associated emissions episodes), wastewater points of determination (PODs), and storage tanks;
   iii. The applicable control requirements pursuant to 40 CFR 63, Subpart FFFF, including the level of required control, and for vents, the level of control for each vent;
   iv. The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device;

v. The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process;
vi. The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process; and,
vii. Calculations and engineering analyses required to demonstrate compliance.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the above records are not retained.

ll. Create and retain a record of each time a safety device is opened to avoid unsafe conditions. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if this record is not retained.

mm. For each affected Group 2 wastewater stream, the Permittee shall retain the following records:
i. MPCU identification and description;
ii. Stream identification code;
iii. Concentration of compounds listed in Table 8 and Table 9 of 40 CFR 63, Subpart FFFF (in ppmw), including documentation of the methodology used to determine concentration; and,
iv. Stream flow rate (in L/min).

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the records listed above are not retained. [*40 CFR 63.2585(a), 40 CFR 63.147(b)(8)*]

Process Changes [15A NCAC 2Q .0508(f)]

nn. If a Group 2 emission point becomes a Group 1 emission point, the Permittee must be in compliance with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in 40 CFR 63, Subpart FFFF must be conducted within 150 days after the switch occurs. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if it does not meet these requirements. [40 CFR 63.2445(d)]

Reporting [15A NCAC 2Q .0508(f)]

oo. The Permittee shall submit a semi-annual compliance report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before February 28 of each calendar year for the preceding six-month period between July and December, and August 31 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
i. Company name and address;
ii. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report;
iii. Date of report and beginning and ending dates of the reporting period;
iv. If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period;
v. For each deviation from an emission limit, operating limit, and work practice standard, include the following information:
(A) The total operating time of the affected source during the reporting period; and,
(B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
vi. Identify each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the previous compliance report. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario;
vii. For the equipment listed below, report in a summary format by equipment type, the number of components for which leaks were detected and for valves, pumps and connectors show the percent leakers, and the total number of components monitored. Also include the number of leaking

components that were not repaired as required, and for valves and connectors, identify the number of components that are determined to be non-repairable as described in 40 CFR 63.1025(c)(3).
(A) Valves in gas and vapor service and in light liquid service;
(B) Pumps in light liquid service;
(C) Connectors in gas and vapor service and in light liquid service; and,
(D) Agitators in gas and vapor service and in light liquid service.

viii. Where any delay of repair for leaks is utilized, report that delay of repair has occurred and report the number of instances of delay of repair.

ix. For pressure relief devices, report the results of all leak monitoring to show compliance conducted within the semiannual reporting period.

x. Report, if applicable, the initiation of a monthly leak monitoring program for valves.

xi. For each affected heat exchanger system for which the Permittee invokes the delay of repair, include the following information:
(A) the presence of the leak and the date that the leak was detected
(B) whether or not the leak has been repaired
(C) the reason(s) for delay of repair
(D) If the leak is repaired, the owner or operator shall report the date the leak was successfully repaired.
(E) If the leak remains unrepaired, the expected date of repair.

D. Polymer Processing Aid Process (ID No. AS-A) controlled by a wet scrubber (ID No. ACD-A1) and a building exhaust vent wet scrubber (ID No. ACD-A3) (voluntary use only)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	**State-enforceable only** Odorous emissions must be controlled	15A NCAC 2D .1806
Toxic Air Pollutants	**State-enforceable only** Toxic air pollutant limits shall not be exceeded. See Sections 2.2 B.1 and 2.2 B.2	15A NCAC 2D .1100

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the above listed equipment without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

STATE-ENFORCEABLE ONLY

2. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Gaseous and mist emissions from the Polymer Processing Aid process area shall be controlled by a wet scrubber **(ID No. ACD-A1)**. The Permittee shall ensure the proper performance of the scrubber by monitoring the following operational parameters:
   i. Liquid flow rate through the packed bed section (minimum of 30 gallons per minute averaged over a 3-hour period), and
   ii. Differential pressure across the packed bed section of the scrubber (maximum of 12 inches of water pressure averaged over a 3-hour period), with a high differential pressure alarm.

Recordkeeping

b. The Permittee shall record the results of inspections in a scrubber log (written or electronic records), which shall be kept on site and made available to Division of Air Quality personnel upon request. Any variance from the manufacturer's recommendations or the permit monitoring requirements, or the failure of the air pollution control equipment to operate in a normal and usual manner, shall be investigated with corrections made and dates of action recorded in the log book. The inspection and maintenance activities, as well as required monitoring for scrubbing liquid flow rates, and scrubber pressure drops, if appropriate, shall be recorded.

E. Wastewater Treatment Area consisting of an extended aeration biological wastewater treatment facility (ID No. WTS-A) and two indirect steam-heated rotary sludge dryers (ID Nos. WTS-B and WTS-C) controlled by a wet scrubber with mist eliminator (ID No. WTCD-1)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	**State-enforceable only** Odorous emissions must be controlled	15A NCAC 2D .1806

STATE ENFORCEABLE ONLY

1. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the above listed equipment without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

b. Odorous emissions from the wastewater treatment sludge dryers **(ID Nos. WTS-B and WTS-C)** shall be controlled by an impingement-type scrubber with caustic injection **(ID No. WTCD-1)**.

Monitoring/Recordkeeping

c. To comply with the provisions of this Permit and ensure that maximum control efficiency is maintained, the Permittee shall perform periodic inspections and maintenance as recommended by the manufacturer. As a minimum, the inspection and maintenance program shall include inspection of spray nozzles, packing material, chemical feed system (if so equipped), and the cleaning/calibration of all associated instrumentation.

d. The Permittee shall record the results of inspections in a scrubber logbook (written or electronic format) that shall be kept on site and made available to NCDAQ personnel upon request. Any variance from the manufacturer's recommendations or the permit monitoring requirements, or the failure of the air pollution control equipment to operate in a normal and usual manner, shall be investigated with corrections made and dates of action recorded in the log book. The inspection and maintenance activities, as well as required monitoring for scrubbing liquid flow rates, and scrubber pressure drops, if appropriate, shall be recorded.

F. Temporary Boiler (ID No. PS-Temp), Natural gas/No. 2 fuel oil-fired (less than 100.0 million Btu per hour maximum heat input)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate Matter	0.2426 pounds of particulate per million Btu	15A NCAC 2D .0503
Sulfur Dioxide	2.3 pounds SO_2 per million Btu heat input	15A NCAC 2D .0516
Visible Emissions	20 percent opacity	15A NCAC 2D .0521(d)
Sulfur Dioxide and Visible Emissions	On site less than 180 days per consecutive twelve month period and use of fuels emitting no more than 0.06 pounds of sulfur dioxide per million Btu heat input.	15A NCAC 2Q .0317 (15A NCAC 2D .0524 [NSPS] Avoidance)
Sulfur Dioxide	Less than 40 tons per consecutive 12-month period	15A NCAC 2Q .0317 (15A NCAC 2Q .0530 [PSD] Avoidance)
Sulfur Dioxide	**Boilers (PS-A, PS-B, PS-C, and PS-Temp)** Less than 702.5 tons per consecutive 12-month period; See Section 2.2 A.1. of this permit.	15A NCAC 2Q .0317 (PSD Avoidance)
Hazardous Air Pollutants	On site less than 180 days per consecutive twelve month period.	15A NCAC 2Q .0317 (15A NCAC 2D .1109/.1111 [MACT] Avoidance)

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter discharged into the atmosphere from the combustion of No. 2 fuel oil in the temporary boiler **(ID No. PS-Temp)** shall not exceed 0.2426 pounds per million Btu heat input.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a above, the Permittee shall be

deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of fuel oil in this source for this regulation.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the temporary boiler **(ID No. PS-Temp)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 F.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Recordkeeping [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of natural gas or fuel oil in this source.

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the temporary boiler **(ID No. PS-Temp)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas or fuel oil in this source.

4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. In order to avoid the applicability of 15A NCAC 2D .0524, the temporary boiler **(ID No. PS-Temp)** shall combust natural gas or distillate oil with a potential sulfur dioxide emission rate no greater than 0.060 lb/MMBtu, be capable of being moved from one location to another, and remain onsite for no longer than 180 consecutive days as defined in 40 CFR 60.41c.

b. The Permittee shall notify the Regional Office in writing within ten days of exceeding the 180 day period.

5. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and major modifications, the temporary boiler **(ID No. PS-Temp)** shall discharge into the atmosphere less 40 tons of sulfur dioxide per consecutive twelve-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 F.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of fuel usage in a log (written or in electronic format), as follows:
   i. The total quantity (in 1,000 gal) of fuel oil fired at the boiler; and,
   ii. The fuel oil supplier certification for any fuel oil fired at the boiler, including the sulfur content of the oil (in percent by weight).

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the fuel usage and fuel oil sulfur content are not created and retained as required above.

d. The Permittee shall calculate monthly and 12-month rolling SO_2 emissions from the temporary boiler within 30 days after the end of each calendar month. Calculations shall be recorded in a logbook (written or electronic format), according to the following formulas:
   i. Calculate SO_2 emissions from the previous calendar month using the following equation:

$$E_{SO_2} = 142 * S * Q_{fo2}$$

Where, E_{SO2} = SO_2 emissions (in lbs) during the previous calendar month,
S = Sulfur content in the fuel oil (in percent by weight), and
Q_{fo2} = Quantity of fuel oil fired at the temporary boiler during the previous calendar month (in 1,000 gal)

   ii. Sum the SO_2 emissions from the boiler for the previous 12-month period to determine the 12-month rolling emission total.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the monthly calculations listed above are not retained or if the 12-month rolling emission totals are greater than the emission limit provided in Section 2.1 F.5.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly SO_2 emissions from the boiler for the previous 17 months;
   ii. The total SO_2 emissions from the boiler for each 12-month period ending during the six month reporting period; and,
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 2Q .0317: AVOIDANCE CONDITION for 15A NCAC 2D .1109: CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters; and 15A NCAC 2D .1111: 40 CFR 63 Subpart DDDDD; MACT for Boilers & Process Heaters

a. In order to avoid the applicability of 15A NCAC 2D .1109 and 15A NCAC 2D .1111, the temporary boiler **(ID No. PS-Temp)** shall not remain on site for more than 180 consecutive days.

b. If any of these boilers remains on site for longer than 180 consecutive days, the Permittee shall notify the Regional Office in writing within ten days of exceeding the 180 day period.

G. SentryGlas® Process (ID No. SGS-A)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20% visible opacity emissions	15A NCAC 2D .0521
Odors	**State-enforceable only** Odorous emissions must be controlled	15A NCAC 2D .1806

1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this source **(ID No. SGS-A)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601and General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from this source.

STATE-ENFORCEABLE ONLY

2. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the above listed equipment without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

H. Polyvinyl Fluoride Process No. 1 (ID No. FS-B)
Polyvinyl Fluoride Process No. 2 (ID No. FS-C)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	**Affected Source: Product Collection Systems (Vents FEP-B4 & FEP-C4)** $E = 4.10\ P^{0.67}$ for $P < 30$ tons/hour where: E = allowable emission rate in pounds per hour, and P = process weight rate in tons per hour	15A NCAC 2D .0515
Visible Emissions	**Affected Source: Product Collection Systems (Vents FEP-B4 & FEP-C4)** 20% visible opacity emissions	15A NCAC 2D .0521
Odors	**State-enforceable only** Odorous emissions must be controlled	15A NCAC 2D .1806
Volatile Organic Compounds	Less than 40 tons per consecutive 12-month period	15A NCAC 2Q .0317 (PSD Avoidance)

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the Product Collection Systems at the polyvinyl fluoride processes **(Vent Nos. FEP-B4 & FEP-C4)** shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above (or the formulas contained in 15A NCAC 2D .0515) can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the production records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the Product Collection Systems at the polyvinyl fluoride processes **(Vent Nos. FEP-B4 & FEP-C4)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission point of the affected source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:

i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 H.2.a, above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

STATE-ENFORCEABLE ONLY

3. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the above listed equipment without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, the Polyvinyl Fluoride (PVF) Process No. 1 and No. 2 **(ID Nos. FS-B and FS-C)** shall discharge into the atmosphere less than 40 tons of VOCs per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test indicate annual emission rates in exceedance of the limit given in Section 2.1 H.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To demonstrate compliance with the limit provided in Section 2.1 H.4.a, within 30 days of the end of each calendar month the Permittee shall create and retain production records and estimate associated VOC emissions for the previous calendar month, as follows:
   i. Record the vent flow rates from the Analytical Equipment ($Q_{FEP\text{-}B1}$ and $Q_{FEP\text{-}C1}$) at the two affected facilities (Vent Nos. FEP-B1 and FEP-C1 respectively) during the previous calendar month (in lb/month);
   ii. Calculate the VOC emissions ($E_{FEP\text{-}BC1}$) from the Analytical Equipment at two affected facilities during the previous calendar month (in lb/month) using the following equation:

$$E_{FEP-BC1} = Q_{FEP-B1} + Q_{FEP-C1}$$

   iii. Record the vent flow rates from the Maintenance Headers ($Q_{FEP\text{-}B2}$ and $Q_{FEP\text{-}C2}$) at the two affected facilities (Vent Nos. FEP-B2 and FEP-C2 respectively) during the previous calendar month (in lb/month);

iv. Record the Maintenance Header VOC Concentrations (C_{FEP-B2} and C_{FEP-C2}) during the periods of time (j) when the Maintenance Header Densitometer data is available at the two affected facilities (Vent No's. F_{EP-B2} and F_{EP-C2} respectively) during the previous calendar month (in lb. VF per lb. Vent gas);

v. Calculate the VOC emissions ($E_{FEP-BC2}$) from the Maintenance Header at two affected facilities during the previous calendar month (in lb/month) using the following equation, where "j" represents the periods of time when the Maintenance Header(s) densitometer data is available, and "k" represents the periods of time when the Maintenance Header(s) densitometer data is not available:

$$E_{FEP-BC2} = \sum_{j=1}^{n}(Q_{FEP\ B2})_j(C_{FEP-B2})_j + \sum_{j=1}^{n}(Q_{FEP\ C2})_j(C_{FEP-C2})_j + \sum_{k=1}^{n}(0.5)(Q_{FEP-B2})_k + \sum_{k=1}^{n}(0.5)(Q_{FEP-C2})_k$$

vi. At least once each hour, record the pressure (P_{FEP-B3} and P_{FEP-C3}) in the Low Pressure Slurry Separators at the two affected facilities (Vent Nos. FEP-B3 and FEP-C3 respectively) during the previous calendar month (in psig);

vii. At least once each hour, record the vinyl fluoride flow rates (Q_{FEP-B3} and Q_{FEP-C3}) to the PVF Reactors at the two affected facilities (Vent Nos. FEP-B3 and FEP-C3 respectively) during the previous calendar month (in lb/hour);

viii. Using an emissions model based on vapor pressure equilibrium data and vinyl fluoride flow rates to the PVF Reactors, determine the hourly VOC emissions (E_{FEP-B3} and E_{FEP-C3}) from the Flash Tank vents at the two affected facilities (Vent Nos. FEP-B3 and FEP-C3 respectively) during the previous calendar month (in lb/hour);

ix. Calculate the sum of the hourly VOC emissions ($E_{FEP-BC3}$) from the Flash Tanks at the two affected facilities during the previous calendar month (in lb/month) using the following equation:

$$E_{FEP-BC3} = \sum(E_{FEP-B3}) + \sum(E_{FEP\ C3})$$

x. Calculate the VOC emissions from fugitive emissions (E_F) from the two affected facilities using accepted practices during the previous calendar month.

xi. Record VOC emissions from any accidental releases (E_A) from the two affected facilities during the previous calendar month.

xii. Calculate the VOC emissions (E) from the two affected facilities during the previous calendar month (in lb/month) using the following equation:

$$E = E_{FEP-BC1} + E_{FEP-BC2} + E_{FEP-BC3} + E_F + E_A$$

xiii. Calculate the 12-month rolling VOC emissions from the two affected facilities by summing the monthly VOC emissions (E), as calculated in xii., above, for the previous consecutive 12-months.

Required records shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not created and retained, or if the 12-month rolling VOC emission rate calculated in xii., above, exceeds the limit in Section 2.1 H.4.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

i. The monthly VOC emissions from two affected polyvinyl fluoride processes for the previous 17 calendar months;
ii. The 12-month rolling VOC emissions for each 12-month period ending during the reporting period; and,
iii. All instances of deviations from the requirements of this permit must be clearly identified.

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

A. BOILERS:

Natural gas/No. 2 fuel oil-fired boiler (ID No. PS-A), 139.4 million Btu per hour maximum heat input,
Natural gas/No. 2 fuel oil-fired boiler (ID No. PS-B), 88.4 million Btu per hour maximum heat input,
Natural gas/No. 2 fuel oil-fired boiler (ID No. PS-C) equipped with a low-NOx burner, 97 million Btu per hour maximum heat input, and,
Temporary boiler (ID No. PS-Temp), natural gas/No. 2 fuel oil-fired (greater than 30.0 and less than 100.0 million Btu per hour maximum heat input).

1. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, the affected boilers **(ID Nos. PS-A, PS-B, PS-C, and PS-Temp)** shall discharge into the atmosphere less than 702.5 tons of SO_2 per consecutive 12-month period.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test indicate annual emission rates in exceedance of the limit given in Section 2.2 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall keep monthly records of fuel usage in a log (written or in electronic format), as follows:
   i. The total quantity (in mmscf) of natural gas fired at the affected boilers;
   ii. The total quantity (in 1,000 gal) of fuel oil fired at the affected boilers; and,
   iii. The fuel oil supplier certification for any fuel oil fired at the affected boilers, including the sulfur content of the oil (in percent by weight).

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the fuel usage and fuel oil sulfur contents are not created and retained as required above.

d. The Permittee shall calculate monthly and 12-month rolling SO_2 emissions from the affected boilers within 30 days after the end of each calendar month. Calculations shall be recorded in a log (written or electronic format), according to the following formulas:
   i. Calculate SO_2 emissions from the previous calendar month using the following equation:

$$E_{SO_2} = 42 * S_{fo2} * Q_{fo2} + 0.6 * Q_{ng}$$

Where, E_{SO2} = SO_2 emissions (in lbs) during the previous calendar month;
S_{fo2} = Sulfur content in the fuel oil (in percent by weight);
Q_{fo2} = Quantity of fuel oil fired during the previous calendar month (in 1,000 gal); and,
Q_{ng} = Quantity of natural gas fired during the previous calendar month (in mmscf).

   ii. Sum the SO_2 emissions from the affected boilers for the previous 12-month period to determine the 12-month rolling emission total.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the monthly calculations listed above are not retained or if the 12-month rolling emission totals are greater than the emission limit provided in Section 2.2 A.1.a of this permit.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly SO_2 emissions from the two affected boilers for the previous 17 calendar months;
   ii. The 12-month rolling SO_2 emissions for each 12-month period ending during the reporting period; and,
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

B. FACILITY-WIDE

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .1100: TOXIC AIR POLLUTANT EMISSIONS LIMITATIONS AND REQUIREMENTS

a. Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Toxic Air Pollutant	Facility-Wide Emission Limit
Acetaldehyde	395 lb/hr
Acetic Acid	54.1 lb/hr
Acrolein	1.17 lb/hr
Acrylonitrile	240 lb/hr
Ammonia	39.5 lb/hr
Ammonium Chromate	0.54 lb/day
Ammonium Dichromate	0.54 lb/day
Aniline	14.6 lb/hr
Arsenic and Inorganic Arsenic Compounds	0.37 lb/yr
Aziridine	5.26 lb/day
Benzene	192 lb/yr
Benzidine and Salts	0.02 lb/yr
Benzo(a)pyrene	52.8 lb/yr
Benzyle Chloride	7.31 lb/yr
Beryllium	6.56 lb/yr
Beryllium Chloride	6.56 lb/yr
Beryllium Fluoride	6.56 lb/yr
Beryllium Nitrate	6.56 lb/yr
Bis-Chloromethyl Ether	0.59 lb/yr
Bromine	2.92 lb/hr
1,3-Butadiene	272 lb/yr

Toxic Air Pollutant	Facility-Wide Emission Limit
Cadmium	8.8 lb/yr
Cadmium Acetate	8.8 lb/yr
Cadmium Bromide	8.8 lb/yr
Calcium Chromate	0.13 lb/yr
Carbon Disulfide	163 lb/day
Carbon Tetrachloride	10,723 lb/yr
Chlorine	13.1 lb/hr; 32.9 lb/day
Chlorobenzene	1,929 lb/day
Chloroform	6,882 lb/yr
Chloroprene	51.1 lb/hr; 386 lb/day
Chromic Acid	0.54 lb/day
Chromium (VI)	0.13 lb/yr
Cresol	32.15 lb/hr
p-Dichlorobenzene	965 lb/hr
Dichlorodifluoromethane	217,477 lb/day
Dichlorofluoromethane	438 lb/day
Di(2-ethylhexyle)phthalate	26.3 lb/day
Dimethyl Sulfate	2.63 lb/day
1,4-Dioxane	491 lb/day
Epichlorohydrin	132.832 lb/yr
Ethyl Acetate	2,046 lb/hr
Ethylenediamine	36.5 lb/hr; 263 lb/day
Ethylene Dibromide	640 lb/yr
Ethylene Dichloride	6,081 lb/yr
Ethylene Glycol Monoethyl Ether	27.8 lb/hr; 105 lb/day
Ethylene Oxide	43.2 lb/yr
Ethyl Mercaptan	1.46 lb/hr
Fluorides	3.65 lb/hr; 14.03 lb/day
Formaldehyde	2.19 lb/hr
Hexachlorocyclopentadiene	0.15 lb/hr; 0.53 lb/day
Hexachlorodibenzo-p-dioxine	0.12 lb/yr
n-Hexane	965 lb/day
Hexane Isomers	5,262 lb/hr
Hydazine	0.53 lb/day

Toxic Air Pollutant	Facility-Wide Emission Limit
Hydrogen Chloride	10.2 lb/hr
Hydrogen Cyanide	16.1 lb/hr; 123 lb/day
Hydrogen Sulfide	30.7 lb/hr
Maleic Anhydride	1.46 lb/hr; 10.5 lb/day
Manganese & Compounds	27.2 lb/day
Manganese Cyclopentadienyl Tricarbonyl	0.53 lb/day
Manganese Tetroxide	5.44 lb/day
Mercury, Alkyl	0.05 lb/day
Mercury, Aryl & Inorganic	0.53 lb/hr
Mercury, vapor	0.53 lb/hr
Methyl Chloroform	3,581 lb/hr; 10,523 lb/day
Methylene Chloride	24.85 lb/hr; 38,409 lb/yr
Methyl Ethyl Ketone	1,293 lb/hr; 3,245lb/day
Methyl Isobutyl Ketone	438 lb/hr; 2,245 lb/day
Methyl Mercaptan	0.73 lb/hr
Nickel Carbonyl	0.53 lb/day
Nickel Metal	5.26 lb/day
Nickel, Soluble Compounds as Nickel	5.26 lb/day
Nickel Subsulfide	3.36 lb/yr
Nitric Acid	14.6 lb/hr
Nitrobenzene	7.31 lb/hr; 52.6 lb/day
n-Nitrosodimethlamine	80.0 lb/yr
Pentachlorophenol	0.37 lb/hr; 2.63 lb/day
Perchloroethylene	304,073 lb/yr
Phenol	13.9 lb/hr
Phosgene	2.19 lb/day
Phosphine	1.90 lb/hr
Polycholinated Biphenyls	133 lb/yr
Potassium Chromate	0.54 lb/day
Potassium Dichromate	0.54 lb/day
Sodium Chromate	0.54 lb/day
Sodium Dichromate	0.54 lb/day
Strontium Chromate	0.13 lb/yr
Styrene	155 lb/hr

Toxic Air Pollutant	Facility-Wide Emission Limit
Sulfuric Acid	1.46 lb/hr; 10.5 lb/day
Tetrachlorodibenzo-p-dioxin	0.0048 lb/yr
1,1,1,2-Tetrachloro-2,2-Difluoroethane	45,600 lb/day
1,1,2,2,-Tetrachloro-1,2-Difluoroethane	45,600 lb/day
1,1,1,2-Tetrachloroethane	10,082 lb/yr
Toluene	818 lb/hr; 4,122 lb/day
Toluene-2,4-diisocyanate	0.22 lb/hr; 0.44 lb/day
Trichloroethylene	94,423 lb/yr
Trichlorofluoromethane	491,077 lb/day
1,1,2-Trichloro-1,2,2-Trifluoroethane	13,885 lb/hr
Vinyl Chloride	608 lb/yr
Vinylidene Chloride	105 lb/day
Xylene	950 lb/hr; 2,368 lb/day
Zinc Chromate	0.13 lb/yr

Recordkeeping

b. For compliance purposes, the Permittee shall maintain records of production rates, throughput, material usage, periods of excess emissions, failure of air pollution control equipment to operate in a normal and usual manner, and other process operational information, that allows for evaluation for compliance with the toxic air pollutant limits. These records shall be retained for a minimum of three years from the date of recording, and access to these records shall be provided to the Division of Air Quality staff upon request.

Reporting

c. For compliance purposes, within thirty (30) days after each calendar year quarter the following shall be reported to the Regional Supervisor, Division of Air Quality:
   i. Any and all exceedences of applicable toxic air pollutant emission limits during the previous calendar year quarter.
   ii. The maximum pounds per 1-hour emission rate at any time during the previous calendar year quarter for all applicable toxic air pollutants that have a listed emission rate in pounds per hour.
   iii. The maximum pounds per 24-hour emission rate at any time during the previous calendar year quarter for all applicable toxic air pollutants that have a listed emission rate in pounds per day.
   iv. The yearly emission rate for the 12-month period ending with the previous calendar year quarter for all applicable toxic air pollutants that have a listed emission rate in pounds per year.

STATE-ENFORCEABLE ONLY

2. 15A NCAC 2D .1100: TOXIC AIR POLLUTANT EMISSIONS LIMITATIONS AND REQUIREMENTS

a. Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Emission Source	Toxic Air Pollutant	Emission Limits
High dispersion stacks **(ID Nos. NEP-Hdr-1, NEP-Hdr-2, AEP-A1, and FEP-A1)**	Hydrogen Fluoride	7.28 lb/hr; 52.45 lb/day
All other sources	Hydrogen Fluoride	2.7 lb/hr; 19.4 lb/day

Monitoring

b. The Permittee shall ensure the proper performance of the Nafion Baffle Plate-Type Tower Scrubbers **(ID Nos. NCD-Hdr-1 and NCD-Hdr-2)** by monitoring the injection liquid flow rate (minimum of 7,000 kilograms per hour, averaged over a 3-hour period).

Recordkeeping

c. The Permittee shall record the results of inspections of the Nafion Baffle Plate-Type Tower Scrubbers **(ID Nos. NCD-Hdr-1 and NCD-Hdr-2)** in a scrubber logbook (written or electronic records) that shall be kept on site and made available to Division of Air Quality personnel upon request. Any variance from the manufacturer's recommendations or the permit monitoring requirements, or the failure of the air pollution control equipment to operate in a normal and usual manner, shall be investigated with corrections made and dates of action recorded in the log book. The inspection and maintenance activities, as well as required monitoring for scrubbing liquid flow rates, and scrubber pressure drops, if appropriate, shall be recorded.

d. The Permittee shall maintain records of production rates, throughput, material usage, periods of excess emissions, failure of air pollution control equipment to operate in a normal and usual manner, and other process operational information, that allows for evaluation for compliance with the toxic air pollutant limits. These records shall be retained for a minimum of three years from the date of recording, and access to these records shall be provided to the Division of Air Quality staff upon request.

Reporting

e. For compliance purposes, within thirty (30) days after each calendar year quarter the following shall be reported to the Regional Supervisor, Division of Air Quality:
   i. Any and all exceedences of applicable TAP emission limits during the previous calendar year quarter.
   ii. The maximum pounds per 1-hour emission rate at any time during the previous calendar year quarter for all applicable toxic air pollutants that have a listed emission rate in pounds per hour.
   iii. The maximum pounds per 24-hour emission rate at any time during the previous calendar year quarter for all applicable toxic air pollutants which have a listed emission rate in pounds per day.

STATE-ENFORCEABLE ONLY

3. 15A NCAC 2D .0541: CONTROL OF EMISSIONS FROM ABRASIVE BLASTING

a. The Permittee shall ensure that any abrasive blasting operation conducted outside a building or conducted indoors and vented to the atmosphere is performed in accordance with the requirements set forth in 15A NCAC 2D .0521, Control of Visible Emissions. Any visible emissions reading for abrasive blasting performed outside a building shall be taken at a spot approximately one meter above the point of abrasive blasting with a viewing distance of approximately five meters.

b. All abrasive blasting operations shall be conducted within a building, except as provided in i. or ii. below. The following abrasive blasting operations need not be conducted within a building:
   i. Abrasive blasting of an item that exceeds eight feet in any dimension; or,
   ii. Abrasive blasting of a surface situated at its permanent location or not further away from its permanent location than is necessary to allow the surface to be blasted.

c. Any abrasive blasting operation conducted outside a building, as provided in Section 2.2 B.3.b.i or ii., above, shall take appropriate measures to ensure that the fugitive dust emissions created by the abrasive blasting operation do not migrate beyond the property boundaries in which the abrasive blasting operation is being conducted. Appropriate measures include the following:
   i. Addition of a suppressant to the abrasive blasting material;
   ii. Wet abrasive blasting;
   iii. Hydro-blasting;
   iv. Vacuum blasting;
   v. Shrouded blasting; or
   vi. Shrouded hydro-blasting.

4. **40 CFR Part 68 "ACCIDENTAL RELEASE PREVENTION REQUIREMENTS: RISK MANAGEMENT PROGRAMS UNDER THE CLEAN AIR ACT, SECTION 112(r)"**
The Permittee shall comply with all applicable requirements in accordance with 40 CFR Part 68 including submitting a Risk Management Plan to EPA pursuant to 40 CFR Part 68.150 prior to June 21, 1999 or as specified in 40 CFR Part 68.10.

SECTION 3 - GENERAL CONDITIONS (version 3.6)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 2Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environment and Natural Resources upon request.

C. **Severability Clause** [15A NCAC 2Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 2Q .0507(e) and 2Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 2Q .0508(i)(2)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 2Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 2Q .0524 and 2Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.
3. Minor Permit Modifications [15A NCAC 2Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q .0515.
4. Significant Permit Modifications [15A NCAC 2Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.
5. Reopening for Cause [15A NCAC 2Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 2Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 2Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.

4. Emissions Trading [15A NCAC 2Q .0523(c)]
   To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

I.A. **Reporting Requirements for Excess Emissions and Permit Deviations**

[15A NCAC 2D .0535(f) and 2Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. *(Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
   a. Pursuant to 15A NCAC 2D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
      i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
         - name and location of the facility;
         - nature and cause of the malfunction or breakdown;
         - time when the malfunction or breakdown is first observed;
         - expected duration; and
         - estimated rate of emissions;
      ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
      iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 2D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
   a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. **Other Requirements under 15A NCAC 2D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 2D .0535(c)(1) through (7).
2. 15A NCAC 2D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]
The Permittee shall be subject to the following provisions with respect to emergencies:
1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3, below, are met:
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 2Q .0508(e) and 2Q .0513(b)]
This 15A NCAC 2Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 2Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this 15A NCAC 2Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 2Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 2Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 2Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 2Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 2Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 2Q .0508(f) and 2Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all

calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 2Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 2Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 2Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 2Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 2Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 2Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 2Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 2Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 2Q .0107 and 2Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 2Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 2Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40

CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.

2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR §82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 2Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** - FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 2Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 2D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 2D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 2D .0200]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 2D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 2D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 2D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 2Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 2D.
If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is

operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.

4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
   a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
      (1) Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
      (2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
      (3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
   b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 2D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 2Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 2Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 2Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 2Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. **Fugitive Dust Control Requirement** [15A NCAC 2D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or

operator may be required to submit a fugitive dust plan as described in 2D .0540(f).
"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 2Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 2Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
   a. a description of the change at the facility;
   b. the date on which the change will occur;
   c. any change in emissions; and
   d. any permit term or condition that is no longer applicable as a result of the change.

   In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 2Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal Environment Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 2Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CAA	Clean Air Act
DAQ	Division of Air Quality
DENR	Department of Environment and Natural Resources
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound